Universiti Teknologi MARA

LetsFast: Learning Fasting Through Interactive AR Storytelling

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Thesis submitted in fulfilment of the requirements for Bachelor of Information Technology (Hons.)

Faculty of Computer and Mathematical Sciences

December 2019

ACKNOWLEDGEMENT

ABSTRACT

There are five official acts considered obligatory for all Muslims are the five pillars of Islam. One of the five pillars of Islam is fasting during Ramadhan. Ramadan is the best month to train children and teach them how to overcome the desires of his body and develop their ability to shoulder responsibility. It has been proven that the best time to train children to perform religious obligations at an early age. The current problem is scenario of fasting especially suhoor time is less noticeable than breaking time. Besides, religious subject especially on fasting topic is less attractive as it is providing more theory in textbook than having practical in the classroom. Therefore, the purpose of this project is to identify user requirement, design and develop an interactive learning of fasting using an Augmented Reality (AR) mobile applicationLetsFast is an Android interactive learning mobile application that using an Augmented Reality storytelling technique to deliver the scenario about suhoor in fasting during Ramadhan to children. This project is focusing on the target user of this mobile application who are primary school student, parents and teachers. The language use for this mobile application is Malay. For this project, marker-based Augmented Reality is used. A flash card are used as a marker for the 3D animation of suhoor scenario to appear in AR storytelling form. The method use for the development of LetsFast mobile application is MADLC. However, for this project, the development phases only been done until prototyping and testing phase. In design phase, the main software used to develop this mobile application are Unity for the interface with C# language for coding and Blender for 3D model and animation. For the outcome, user will get experience and understand the elements in scenario of suhoor such as the du'a, time and the environment.

Keywords: Interactive Mobile Learning, 3D model, Augmented Reality, Marker-Based technique, Suhoor, Scenario, MADLC, C#.

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CHAPTER ONE

INTRODUCTION

This chapter discusses the research background such as the project's problem statement, objectives, scope and significance. The project's background will provide readers with an explanation of what the project is all about. Therefore, the declaration of the problem refers to the current issues defined adherence to the project need. In addition, the project's objectives specified the project's objective and result. The scope is justified, last but not least, and the significance of the project is discussed.

1.1 Background of Study

Five official acts considered obligatory for all Muslims are the five pillars of Islam. The Quran presents five pillars of Islam as a framework for worship and a sign of commitment to faith. The five pillars are the Shahadah, which is witnessing the oneness of God and the prophet hood of Muhammad. Secondly, regular observance of the five prescribed daily prayers or salat. Next, paying zakat followed by fasting during the month of Ramadan, and lastly need to perform the hajj (pilgrimage during the prescribed month) at least once in a lifetime.

One of the five pillars of Islam is fasting during Ramadhan. During fasting hours, reading and reflecting on the entire Quran, the holy book, and abstaining from smoking are expected to been done by all Muslims. Fasting is also known as another unique moral and spiritual characteristic of Islam. Any failure to observe it without reasonable excuses is a grave sin in the sight of God as this is a pillar of Islam, (El-Ashi, 2016). Ramadan is the best month to train children and teach them how to overcome the desires of his body and develop their ability to shoulder responsibility. It has been proven that the best time to train children to perform religious obligations at an early age (al-Razi, 2019). Al-Bukhari and Muslim may Allah have mercy upon them narrated that